

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) In a communications network, a system for providing wireless data service, ~~said~~the system comprising:
 - a) —a plurality of mobile stations;
 - b) —at least one packet data network;
 - e) —a wireless access integrated node (WAIN) directly intermediating between the plurality of mobile stations and the at least one packet data network to provide a wired or wireless dedicated broadband connection, wherein the WAIN automatically configures itself to minimize interference between the plurality of mobile stations and the at least one packet network, ~~said~~the WAIN ~~wireless access integrated node~~ having:
 - (i) a plurality of mobile data transmission modules and signaling modules for sending, processing, and receiving data packets;
 - (ii) a plurality of interfaces and ports for sending messages to and receiving messages from at least one packet data network, systems, and mobile stations interconnected with the WAIN~~wireless access integrated node~~;
 - (iii) a database containing subscription, operating, and charging information for the plurality of mobile stations attached to the ~~wireless access integrated node~~ WAIN; and
 - (iv) a main controller to collect charging data and coordinate and control ~~said~~the mobile data transmission modules, signaling modules, interfaces, and databases;

- d)——a radio interface interconnecting the plurality of mobile stations and the ~~wireless access integrated node~~WAIN; and
- (e)——a network interface interconnecting the ~~wireless access integrated node~~WAIN and at least one packet data network.
2. (Previously Amended) The system of claim 1, wherein the packet data network comprises the Internet.
 3. (Previously Amended) The system of claim 1, wherein the packet data network comprises an intranet.
 4. (Previously Amended) The system of claim 3, wherein a content server is attached to the intranet.
 5. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules comprises a Packet Data Convergence Protocol (PDCP) ~~PDCP~~ module.
 6. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules comprises a Radio Link Control / Medium Access Control (RLC/MAC) ~~RLC/MAC~~ module.
 7. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission ~~module~~ modules comprises a Transceiver (TRX)~~TRX~~ module.
 8. (Previously Amended) The system of claim 1, wherein the plurality of signaling modules comprises Radio Resource Management.
 9. (Currently Amended) The system of claim 1, wherein the plurality of signaling modules comprises General Packet Radio Service (GPRS) ~~GPRS~~ Mobility Management.

10. (Previously Amended) The system of claim 1, wherein the plurality of signaling modules comprises Session Management.
11. (Previously Amended) The system of claim 1, wherein the plurality of interfaces comprises a voice interface.
12. (Previously Amended) The system of claim 1, wherein the plurality of interfaces comprises a local information system interface.
13. (Previously Amended) The system of claim 1, wherein the plurality of interfaces comprises an appliance control interface.
14. (Previously Amended) The system of claim 1, wherein the plurality of interfaces comprises an intranet gateway.
15. (Previously Amended) The system of claim 1, wherein the plurality of ports comprises an RJ11 port for a fixed wire telephone connection.
16. (Currently Amended) The system of claim 1, wherein the system interconnected with the ~~wireless access integrated node~~WAIN comprises a local information system.
17. (Currently Amended) The system of claim 16, wherein the ~~wireless access integrated node~~WAIN has means for remotely synchronizing a personal digital assistant with its host program on the local information system.
18. (Currently Amended) The system of claim 16, wherein the ~~wireless access integrated node~~WAIN has a voice recognition means for audibly relaying service request commands from the mobile station to the local information system.
19. (Currently Amended) The system of claim 16, wherein the ~~wireless access integrated node~~WAIN has a text-to-speech means for audibly relaying information from the local information service to the mobile station.

20. (Currently Amended) The system of claim 1, wherein the system interconnected with the ~~wireless access integrated node~~WAIN is a local appliance system.
21. (Currently Amended) The system of claim 20, wherein the ~~wireless access integrated node~~WAIN has a voice recognition means for audibly relaying remote control commands from the mobile (station to the application command system).
22. (Currently Amended) The system of claim 20, wherein the ~~wireless access integrated node~~WAIN has a text-to-speech means for audibly relaying an appliance status report delivered from the appliance control system to the mobile station.
23. (Currently Amended) The system of claim 1, wherein the system interconnected with the ~~wireless access integrated node~~WAIN comprises a wireless data controller.
24. (Previously Amended) The system of claim 1, wherein the radio interface comprises a GPRS radio interface.
25. (Currently Amended) The system of claim 1, wherein the network interface comprises an Internet Protocol (IP) ~~IP~~-interface.
26. (Currently Amended) The system of claim 1, further including means for enabling a mobile station user to obtain a temporary subscription to the ~~wireless access integrated node~~WAIN through a dynamic registration and cancellation process in which user's mobile station's secret subscription identity is linked with the user's mobile station's mobile equipment identity.
27. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for modulating data packets.

28. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for compressing data packets.
29. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for encrypting data packets.
30. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for multiplexing data packets.
31. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for correcting errors in data packets.
32. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for segmenting data packets.
33. (Previously Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for controlling the sequence of data packets.
34. (Currently Amended) The system of claim 1, wherein the ~~wireless access integrated node~~WAIN includes means for supporting mobile stations roaming between a local ~~wireless access integrated node~~WAIN environment and a public mobile network.
35. (Currently Amended) The system of claim 1, wherein the ~~wireless access integrated node~~WAIN includes means for supporting mobile stations roaming between different ~~wireless access integrated node~~WAIN systems.
36. (Currently Amended) The system of claim 1, wherein the ~~wireless access integrated node~~WAIN includes means for providing wireless data services in a community service area located within cells of a public network when the

~~wireless access integrated node~~WAIN is clustered with several other ~~wireless access integrated node~~WAIN systems.

37. (Currently Amended) The system of claim 1, wherein the ~~wireless access integrated node~~WAIN supports mobile stations roaming between different ~~wireless access integrated node~~WAIN systems.
38. (Currently Amended) The system of claim 1, wherein the ~~wireless access integrated node~~WAIN includes means for configuring ~~said~~the ~~wireless access integrated node~~WAIN as a network node where no specified system parameters are present.
39. (Currently Amended) In a communications network, a device for providing access to wireless data services, ~~said~~the device comprising:
- (a)——a plurality of mobile data transmission modules and signaling modules for sending, processing, and receiving data packets;
 - (b)——a plurality of interfaces and ports for sending messages to and receiving messages from at least one packet data network, systems, and a plurality of mobile stations interconnected with ~~said~~the device;
 - (c)——a database containing subscription, operation, and charging information for the plurality of mobile stations attached to ~~said~~the device; and
 - (d)——a main controller to collect charging data and coordinate and control ~~said~~the mobile data transmission modules, signaling modules, interfaces, port, and database; wherein the device directly intermediating between the plurality of mobile stations and at least one packet data network to provide a wired or wireless dedicated broadband connection, wherein the device

automatically configures itself to minimize interference between the plurality of mobile stations and the at least one packet network.

40. (Previously Amended) The device of claim 39, wherein the packet data network comprises the internet.
41. (Previously Amended) The device of claim 39, wherein the packet data network comprises an intranet.
42. (Previously Amended) The device of claim 41, wherein a content server is attached to the internet.
43. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission modules comprises a Packet Data Convergence Protocol (PDCP) ~~PDCP~~-module.
44. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission modules comprises a Radio Link Control / Medium Access Control (RLC/MAC) ~~RLC/MAC~~-module.
45. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission modules comprises a Transceiver (TRX) ~~TRX~~ module.
46. (Previously Amended) The device of claim 39, wherein the plurality of signaling modules comprises a radio resource management module.
47. (Currently Amended) The device of claim 39, wherein the plurality of signaling modules comprises a General Packet Radio Service (GPRS) ~~GPRS~~-mobility management module.
48. (Previously Amended) The device of claim 39, wherein the plurality of signaling modules comprises a session management module.

49. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises a voice interface.
50. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises a local information system interface.
51. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises an appliance control interface.
52. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises an intranet gateway.
53. (Currently Amended) The device of claim 39, wherein the plurality of ports comprises a Registered Jack number 11 (RJ11) ~~an RJ11~~ port for a fixed wire telephone connection.
54. (Previously Amended) The device of claim 39, wherein the system interconnected with the device comprises a local information system.
55. (Previously Amended) The device of claim 39, further including a voice recognition subsystem.
56. (Previously Amended) The device of claim 39, further including a text-to-speech synthesis subsystem.
57. (Previously Amended) The device of claim 39, wherein the system interconnected with the device comprises a local appliance control system.
58. (Previously Amended) The device of claim 39, wherein the system interconnected with the device comprises a wireless data collector.
59. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises a radio interface including a GPRS radio interface.

60. (Previously Amended) The device of claim 39, wherein the plurality of interfaces comprises a network interface including an IP interface.
61. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for modulating data packets.
62. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for compressing data packets.
63. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for encrypting data packets.
64. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for multiplexing data packets.
65. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for correcting errors in data packets.
66. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for segmenting data packets.
67. (Previously Amended) The device of claim 39, wherein the plurality of mobile data transmission modules includes means for controlling the sequence of data packets.
68. (Currently Amended) The device of claim 39, further including means for configuring ~~said~~the device as network node where no specified system parameters are present.

Claims 69-74 (Cancelled)